

1. REMARKS / DISCUSSION OF ISSUES

Claims 1-21 are pending in the application. Claims 1 and 12 are independent. As the claims are not amended in the present Response, a listing is not required and not provided.

Rejections under 35 U.S.C. § 112, ¶ 2

Claims 2, 3, 13 and 14 were rejected under 35 U.S.C. § 112, ¶ 2 for allegedly failing to particularly point out and distinctly claim certain subject matter. In particular, the Office Action asserts that the term ‘non-zero delay’ is indefinite. Applicants have considered this rejection and for at least the reasons set forth herein, respectfully submit that the rejection is improper and should be withdrawn.

Claim 1 features:

a transmitter having first and second transmitting antennae (36, 38), the **signal path of the first antenna (36) exhibiting a different delay than the signal path of the second antenna (38)**; and

a receiver having third and fourth receiving antennae (36, 38), **the signal path of the third antenna (36) exhibiting a different delay than the signal path of the fourth antenna (38)**.

Claim 2 features:

wherein **a nonzero delay of one of the signal paths** of the first and second antennae (36, 38) is different from **a nonzero delay of one of the signal paths** of the third and fourth antennae (36, 38).

Applicants respectfully submit that the non-zero delay clearly and unequivocally refers to the signal paths specifically set forth in claim 1, thereby providing antecedent basis. While Applicants maintain that on its face, this term is clear, Applicants direct the Examiner to Fig. 2 of the filed application and its supporting disclosure as an illustrative

teaching of the featured delay. To this end, in an embodiment, an access point 70 and four remote terminals 80a-80d are part of a WLAN system. The signal path delay of the first antenna 36 differs from the signal path delay of the second antenna 38. Illustratively, this delay is τ_1 . The receive antennas 36, 38 of for example, terminal 80a also have a signal path delay. Illustratively, this delay is τ_2 . The delays τ_1 , τ_2 are different as featured in claim 1; and are non-zero as featured in claim 2.

Finally, Applicants respectfully submit that one having ordinary skill in the art would readily understand the signal path delays are specifically featured in claims 1 and 2; as these concepts are basic to electromagnetic wave signal transmission.

By similar analysis, Applicants submit that claims 3, 13 and 14 are also definite within the requirements of 35 U.S.C. § 112, ¶ 2.

For at least the reasons set forth above, Applicants respectfully submit that the rejection of claims 2, 3, 13 and 14 is improper and should be withdrawn.

Rejections under 35 U.S.C. § 102

Claims 1,2, 4, 5, 9 and 11 were rejected under 35 U.S.C. § 102(e) as being anticipated by *Tehrani, et al.* (U.S. Patent Publication 20020164963). For at least the reasons set forth herein, Applicants respectfully submit that this rejection is improper and should be withdrawn.

Claim 1 features:

a transmitter having **first and second transmitting antennae** (36, 38), the **signal path of the first antenna (36) exhibiting a different delay than the signal path of the second antenna (38)**; and

a receiver having **third and fourth receiving antennae** (36, 38), the **signal path of the third antenna (36) exhibiting a different delay than the signal path of the fourth antenna (38)**.

As noted above, in certain embodiments, delays τ_1 and τ_2 are between the first and second transmitting antennae and between the third and fourth receiving antennae, respectively.

The Office Action asserts that *Tehrani, et al.* discloses a transmitter with two antennae 138,140 and a receiver with two antennae 122, 124; and that: column 0044, lines 10-12), the signal path of the first antenna exhibiting a different delay than the signal path of the second antenna (this limitation is inherent because in a multipath environment, the signal takes different paths from the source to get to destination and each of these signal experiences different delays as a result each antenna experience different delays) (column 005, lines 7-11); and column 0044, lines 10-12), the signal path of the third antenna exhibiting a different delay than the signal path of the fourth antenna (this limitation is inherent because in a multipath environment, the signal takes different paths from the source to get to destination and each of these signal experiences different delays as a result each antenna experience different delays) (column 005, lines 7-11).

At the outset, Applicants note that the Office Action cites 'columns' in the applied art. The applied reference includes numbered pages and number paragraphs and not numbered columns. Clarification is respectfully requested, as Applicants are placed in a prejudicial position due to the confusion as to what portions of a rather voluminous document are being cited by the Examiner. (For example, page 5, lines 7-11 and paragraph [005] describe multiple antennae). Applicants respectfully submit that such clarification should be provided in a subsequent non-final Office Action, if claim rejections are maintained.

The above notwithstanding, Applicants respectfully traverse the rejection for at least the following reasons.

A proper rejection of a claim under 35 U.S.C. § 102 requires that a single prior art reference disclose each element of the claim. *See, e.g., W.L. Gore & Assoc., Inc. v.*

Garlock, Inc., 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983). Anticipation requires that each and every element of the claimed invention be disclosed in a single prior art reference. *See, e.g., In re Paulsen*, 30 F.3d 1475, 31 USPQ2d 1671 (Fed. Cir. 1994); *In re Spada*, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990). Alternatively, anticipation requires that each and every element of the claimed invention be embodied in a single prior art device or practice. *See, e.g., Minnesota Min. & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992). For anticipation, there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. *See, e.g., Scripps Clinic & Res. Found. v. Genentech, Inc.*, 927 F.2d 1565, 18 USPQ2d 1001 (Fed. Cir. 1991).

The Office Action fails to cite in the disclosure of *Tehrani, et al.* of the featured signal path delay between the first and second transmitting antennae and the signal path delay between the third and fourth receiving antennae. Rather, the Examiner asserts that these delays are inherent to the disclosure. For at least the reasons discussed presently, Applicants respectfully submit that the Office Action has failed to establish that the missing features are inherent in the applied art.

M.P.E.P. § 2112 IV provides that:

*EXAMINER MUST PROVIDE RATIONALE OR EVIDENCE TENDING
TO SHOW INHERENCY*

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). **"To establish inherency, the extrinsic evidence**

'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

(emphasis added).

Furthermore, a claim rejection must be based on objective evidence of record, and cannot be supported merely on subjective belief and unknown authority. See, e.g., M.P.E.P. § 2144.03; *In re Lee*, 277 F.3d at 1344-45, 61 USPQ2d at 1434-35 (Fed. Cir. 2002); *In re Zerko*, 258 F.3d at 1386, 59 USPQ2d at 1697.

No such concrete evidence has been provided by the Examiner that different delays necessarily result from the teachings of *Tehrani, et al.* Moreover, the Examiner did not submit an affidavit as required by 37 C.F.R. § 1.104(d)(2) if this proposed inherent teaching were based on facts within his personal knowledge (see M.P.E.P. § 2144.03). Applicants respectfully request that such an affidavit be provided if a rejection continues to be made without a citation of any objective evidence.

For at least the reasons set forth above, Applicants respectfully submit that at least one feature is not disclosed in the applied art; and has not been properly established as being inherent in the teachings of the applied art. Therefore, claim 1 is patentable over the applied art. For at least the same reasons, claims 2-11, which depend directly or indirectly from claim 1, are also patentable over the applied art.

Rejections under 35 U.S.C. § 103

Claims 3 and 6-21 were rejected under 35 U.S.C. § 103(a) as being obvious over

Tehrani, et al. and a secondary reference and (in one instance) a tertiary reference. As noted above, claims 3 and 6-11 depend from claim 1, which is patentable over the applied art for at least the reasons set forth above.

The rejection of claim independent 12 applies the reference to *Tehrani, et al.* substantially identically to the featured signal path delays as applied in the rejection of claim 1. Accordingly, Applicants respectfully submit that at least one feature of claim 12 is not disclosed in the applied art; and has not been properly established as being inherent in the teachings of the applied art. Therefore, claim 12 is patentable over the applied art. For at least the same reasons, claims 13-21, which depend directly or indirectly from claim 12, are also patentable over the applied art.

Conclusion

In view of the foregoing, applicant(s) respectfully request(s) that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies to charge payment or credit any overpayment to Deposit Account Number 50-0238 for any additional fees, including, but not limited to, the fees under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17.

If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted on behalf of:
Phillips Electronics North America Corp.

A handwritten signature in black ink, appearing to read 'William S. Francos', is written over a horizontal line.

by: William S. Francos (Reg. No. 38,456)

Date: May 7, 2007

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